## **CLAIMS**

1. A method for configuring a receiver to detect a plurality of emitters, the method comprising acts of:

determining a first receiver configuration to detect at least one of the plurality of emitters;

determining a second receiver configuration to detect the at least one of the plurality of emitters;

determining a relative cost of the first receiver configuration to the second receiver configuration; and

determining, for at least one of the plurality of emitters, whether the first receiver configuration is preferable over the second receiver configuration based on the determined relative cost.

- 15 2. The method according to claim 1, further comprising acts of determining a third receiver configuration to detect at least one other emitter of the plurality of emitters, and determining whether there exists a conflict between the first receiver configuration and the third receiver configuration.
- 20 3. The method according to claim 1, further comprising an act of selecting at least one of the first receiver configuration and the second receiver configuration that has the smallest dwell duration among the first receiver configuration and the second receiver configuration.
- 25 4. The method according to claim 1, wherein the first receiver configuration comprises a plurality of controls used to operate the receiver.
  - 5. The method according to claim 4, wherein the plurality of controls includes at least one of the following group of controls:

a control that enables and disables function of the receiver; and a control that enables and controls a chopping function on an incoming signal.

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- 6. The method according to claim 14, wherein the plurality of control includes at least one of the following group of controls:
  - a control that adjusts an acceptable count of pulses of an incoming signal that triggers Doppler processing of the incoming signal; and
  - a control that adjusts pulse interval timing that allows a series of pulses to be extracted from the incoming signal.
- 7. The method according to claim 2, wherein the first receiver configuration and the third receiver configuration each comprise a plurality of controls used to operate the receiver, respectively, and the method further comprises an act of determining a conflict in settings of the plurality of controls of the first receiver configuration and the third receiver configuration.
- 15 8. The method according to claim 1, further comprising acts of determining a third receiver configuration to detect at least one other emitter of the plurality of emitters, and determining whether there exists a conflict between the first receiver configuration and the third receiver configuration.
- 20 9. The method according to claim 8, further comprising an act of determining a scan solution for each of the first receiver configuration and the second receiver configuration, if the conflict exists.
  - 10. The method according to claim 8, further comprising an act of indicating, if a conflict exists between the first receiver configuration and the third receiver configuration, the existence of conflict to a user.
    - 11. A computer-readable medium having computer-readable signals stored thereon that define instructions that, as a result of being executed by a computer, instruct the computer to perform a method for configuring a receiver to detect a plurality of emitters, the method comprising acts of:

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determining a first receiver configuration to detect at least one of the plurality of emitters;

determining a second receiver configuration to detect the at least one of the plurality of emitters;

determining a relative cost of the first receiver configuration to the second receiver configuration; and

determining, for at least one of the plurality of emitters, whether the first receiver configuration is preferable over the second receiver configuration based on the determined relative cost.

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12. The computer-readable medium according to claim 11, wherein the method further comprises acts of determining a third receiver configuration to detect at least one other emitter of the plurality of emitters, and determining whether there exists a conflict between the first receiver configuration and the third receiver configuration.

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13. The computer-readable medium according to claim 11, wherein the method further comprises an act of selecting at least one of the first receiver configuration and the second receiver configuration that has the smallest dwell duration among the first receiver configuration and the second receiver configuration.

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14. The computer-readable medium according to claim 11, wherein the first receiver configuration comprises a plurality of controls used to operate the receiver.

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15. The computer-readable medium according to claim 14, wherein the plurality of controls includes at least one of the following group of controls:

a control that enables and disables function of the receiver; and a control that enables and controls a chopping function on an incoming signal.

- 16. The computer-readable medium according to claim 14, wherein the plurality of control includes at least one of the following group of controls:
  - a control that adjusts an acceptable count of pulses of an incoming signal

that triggers Doppler processing of the incoming signal; and
a control that adjusts pulse interval timing that allows a series of pulses to
be extracted from the incoming signal.

The computer-readable medium according to claim 12, wherein the first receiver configuration and the third receiver configuration each comprise a plurality of controls used to operate the receiver, respectively, and the method further comprises an act of determining a conflict in settings of the plurality of controls of the first receiver configuration and the third receiver configuration.

18. The computer-readable medium according to claim 11, wherein the method further comprises acts of determining a third receiver configuration to detect at least one other emitter of the plurality of emitters, and determining whether there exists a conflict between the first receiver configuration and the third receiver configuration.

- 19. The computer-readable medium according to claim 18, wherein the method further comprises an act of determining a scan solution for each of the first receiver configuration and the second receiver configuration, if the conflict exists.
- 20. The computer-readable medium according to claim 18, wherein the method further comprises an act of indicating, if a conflict exists between the first receiver configuration and the third receiver configuration, the existence of conflict to a user.

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